General Water Licence Application
(Application for a new Water Licence)

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GENERAL WATER LICENCE APPLICATION
(APPLICATION FOR NEW WATER LICENCE)

The applicant is referred to the NWB's Guide 4: *Guide to Completing and Submitting a Water Licence Application for a New Licence* for more information about this application form.

LICENCE NO:
(for NWB use only)

1. APPLICANT (PROPOSED LICENSEE) CONTACT INFORMATION (name, address)

Sabina Gold & Silver Corp.
202 - 930 West First Street
North Vancouver, BC
V7P 3N4

Contact: Matthew Pickard

Phone: (604) 998 4175
Fax: (604) 998.1051
e-mail: mpickard@sabinagoldsilver.com

2. APPLICANT REPRESENTATIVE CONTACT INFORMATION if different from Block 1 (name, address)

Same as Block 1

3. NAME OF PROJECT (including the name of the project location)

Sabina Gold & Silver Corp – Back River Project – 2015 Site Preparation Activities

4. LOCATION OF UNDERTAKING

Project Extents

NW Lat	NE Lat	SE Lat	SW Lat
66° 39' 14.4108"	66° 41' 47.0472"	65° 32' 9.6828"	65° 29' 44.412"
NW Long	NE Long	SE Long	SW Long
-107° 44' 7.1088"	-107° 28' 9.8256"	-106° 21' 32.7492"	-106° 36' 54.4206"

Camp Location(s)
Goose Camp Location
Latitude: 65°32'40"N, Longitude: 106°25'41"W

MLA Location (no camp)

Latitude: 66° 38' 52.8108", Longitude -107° 41' 18.2544"

5. **MAP** - Attach a topographical map, indicating the main components of the undertaking.

Figure 1 shows the location of the proposed Site Preparation Activities.

Figure 2 shows the site layout for the proposed activities to be undertaken at the Goose Property including the location of the camp, existing rock quarry, proposed Umwelt quarry, fuel storage, existing airstrip and proposed extension, and the alignment of the all-weather and ice roads.

Figure 3 shows the general layout of the Marine Laydown Area (MLA) and location of the proposed Temporary Laydown Area (TLA).

NTS Map Sheet No.: 076J02, 076J03, 076J05, 076J06, 076J11, 076J12, 076G09, 076G10, 076G15
Map Name: Tinney Hills and Beechy Lake Map Scale: 1/250,000

6. **NATURE OF INTEREST IN THE LAND** - Check any of the following that are applicable to the proposed undertaking (at least one box under the 'Surface' header must be checked).

Sub-surface

☐ Mineral Lease from Nunavut Tunngavik Incorporated (NTI)
Date (expected date) of issuance: _____ Date of expiry: _____

X Mineral Lease from Indian and Northern Affairs Canada (INAC)
Date of issuance: varies Date of expiry: varies

Surface

X Crown Land Use Authorization from Indian and Northern Affairs Canada (INAC)
Date of issuance: 2010-10-31 Date of expiry: 2014-10-31

X Inuit Owned Land (IOL) Authorization from Kitikmeot Inuit Association (KIA)
Date of issuance: December 12, 2013 Date of expiry: December 13, 2014

☐ IOL Authorization from Kivalliq Inuit Association (KivIA)
Date (expected date) of issuance: _____ Date of expiry: _____

☐ IOL Authorization from Qikiqtani Inuit Association (QIA)
Date (expected date) of issuance: _____ Date of expiry: _____

☐ Commissioner's Land Use Authorization
Date (expected date) of issuance: _____ Date of expiry: _____

☐ Other: _____
Date (expected date) of issuance: _____ Date of expiry: _____

Name of entity(s) holding authorizations: Sabina Gold & Silver Corp.

Appendix A lists Sabina's current sub-surface and surface tenure as well as current permits and authorizations.

_____

7. NUNAVUT PLANNING COMMISSION (NPC) DETERMINATION

Indicate the land use planning area in which the project is located.

☐ North Baffin
☐ South Baffin
☐ Akunniq
☐ Keewatin
☐ Sanikiluaq
X **West Kitikmeot**

Is a land use plan conformity determination required?

☐ Yes X **No**

If Yes, indicate date issued and attach copy _____
If No, provide written confirmation from NPC confirming that a land use plan conformity review is not required.

NPC conformity review is not required (NIRB, Notice of Decision December 17, 2012, File 12MN036). NPC has indicated in previous applications and amendment requests for various Water Licences that there is not an approved land use plan for the West Kitikmeot Region and conformity is not required; email dated January 8, 2010 available upon request.

8. NUNAVUT IMPACT REVIEW BOARD (NIRB) DETERMINATION

Is an Article 12 Part 4 screening determination required?

X Yes No

9. DESCRIPTION OF UNDERTAKING – List and attach plans and drawings or project proposal.

Sabina proposes to undertake Site Preparation activities at the Back River Project during 2015 including; development of an all-weather road from Goose Camp to the existing airstrip and quarry as well as to the proposed Umwelt Quarry, and development of an ice-road for access to the quarries during the winter season before the all-weather road is completed. The existing all-weather airstrip will be extended to approximately 1,524m long using material from the exiting Goose Quarry and the proposed Umwelt Quarry. A temporary laydown area will be staged at the Marine Laydown Area to store equipment, materials and fuel for 2016 construction activities (note: 2016 activities are not included in the scope of this application).

The "Sabina Back River Project 2015 Site Preparation Activities Project Description/Environmental Screening Report" presented in **Appendix B** provides a detailed description of the proposed activities along with layout figures.

10. OPTIONS – Provide a brief explanation of the alternative methods or locations that were considered to carry out the project.

An explanation of alternatives is provided in Appendix B, Section 6.

11. CLASSIFICATION OF PRIMARY UNDERTAKING - Indicate the primary classification of undertaking by checking one of the following boxes.

☐ Industrial
☐ Agricultural
X **Mining and Milling (includes exploration/drilling/exploration camps)**
☐ Conservation
☐ Municipal (includes camps/lodges)
☐ Recreational
☐ Power
☐ Miscellaneous (describe below):

See Schedule II of *Northwest Territories Waters Regulations* for Description of Undertakings.

Information in accordance with applicable Supplemental Information Guidelines (SIG) must be submitted with a New Water Licence Application. Indicate which SIG(s) are applicable to your application.

☐ Hydrostatic Testing
☐ Tannery
☐ Tourist / Remote Camp
☐ Landfarm & On-Site Storage of Hydrocarbon Contaminated Soil
☐ Onshore Oil and Gas Exploration Drilling
X Mineral Exploration / Remote Camp
☐ Advanced Exploration
☐ Mine Development
☐ Municipal
☐ General Water Works
☐ Power

The Supplementary Questionnaire is attached to this application.

12. **WATER USE -** Check the appropriate box(s) to indicate the type(s) of water use(s) being applied for.

☐ To obtain water for camp/ municipal purposes
☐ To obtain water for industrial purposes
X To cross a watercourse
X To alter the flow of, or store water
X Other: Ice road construction, dust suppression
X To divert a watercourse
X To modify the bed or bank of a watercourse
☐ Flood control

13. **QUANTITY AND QUALITY OF WATER INVOLVED -** For each type of water use indicated in Block 12, provide the source of water, the quality of the water source and available capacity, the estimated quantity to be used in cubic meters per day, method of extraction, as well as the quantities and qualities of water to be returned to source.

Name of water source(s) (show location(s) on map):
Water to be used for ice road construction, dust suppression and compaction will be sourced from Goose Lake (shown on Figure 2).

Water crossings associated with the all-weather road are shown on Figure 2.

A section of Rascal Stream will be re-aligned as part of the proposed activities. The flow of this section, Rascal Stream East, which currently flows from Rascal Lake to Goose Lake, will be permanently diverted to an adjacent stream flowing northwest to Goose Lake (Rascal Stream West).

Describe the quality of the water source(s) and the available capacity:

Lake water quality in the Goose Property is generally slightly acidic, and lakes tend to be more acidic in the open water season. pH levels below the CCME guideline range of 6.5 to 9.0 were periodically observed in Goose Lake. A summary of lake water chemistry in the Goose Property area, including Goose Lake, is provided below.

Parameter	n	Min	Mean	Max
pH	98	4.8	6.9	8.1
Total alkalinity (mg/L $CaCO_3$)	95	2.3	6.4	32.5
Hardness (mg $CaCO_3$/L)	98	3.6	15.3	81.5
Conductivity (µS/cm)	98	11	39.5	174
Total dissolved solids (mg/L)	98	4	30	128
Total suspended solids (mg/L)	98	0.5*	1.63	7.0
Turbidity (NTU)				

** The minimum value shown is calculated as ½ the lowest detection limit*

The Draft Environmental Impact Statement (DEIS; Volume 2) states that the maximum water volume that can be withdrawn from Goose Lake without incurring a significant effect is in the range of 1,000 m^3/day year round and 2,000 m^3/day during the freshet period (June).

Streams in the Goose Property area, such as Rascal Stream, are largely circum-neutral, with pH levels ranging from 5.6 to 8.2. Most streams had their lowest pH in June and highest pH in August, with the seasonal differences likely due to seasonal variation in runoff (highest in June) and photosynthesis and biogeochemical cycling (higher in August). Other parameters recorded for streams in the Goose Property area shown below.

Parameter	n	Min	Mean	Max
pH	109	5.6	6.7	7.5
Total alkalinity (mg/L $CaCO_3$)	104	1.8	5.0	17
Hardness (mg $CaCO_3$/L)	109	0.5*	16	133
Conductivity (µS/cm)	109	10.5	40	334
Total dissolved solids (mg/L)	109	1*	36	403
Total suspended solids (mg/L)	109	0.5*	1.8	11
Turbidity (NTU)	101	0.14	0.63	2.4

** The minimum value shown is calculated as ½ the lowest detection limit*

Provide the overall estimated quantity of water to be used: 120 m^3/day

Provide the estimated quantity(s) of water to be used from each source:
It is estimated that a maximum of 120m^3/day of water will be sourced from Goose Lake.

Indicate the estimated quantities to be used for each purpose (camp, drilling, etc.)
Up to 120m^3/day of water will be required for the Site Preparation activities. Water will be used to build and maintain the ice road during winter, and for dust suppression and compaction of placed construction materials during the open water season.

Describe the method of extraction(s):
Extraction from Goose lake will come from the current intake infrastructure. Extraction will be undertaken in accordance with DFO's Protocol for Winter Withdrawals from Ice-covered Waterbodies.

Estimated quantity(s) of water returned to source(s): All water to be used for Site Preparation activities will be indirectly returned to Goose Lake as meltwater runoff from the ice-road, and runoff associated with dust suppression usage.

Describe the quality of water(s) returned to source(s):
The quality of water diverted from Rascal Stream East to Rascal Stream West (as per Appendix B) will not be significantly altered from that currently entering Goose Lake directly from to Rascal Stream East.

14. **WASTE** – Check the appropriate box(s) to indicate the types of waste(s) generated and deposited.

- ☐ Sewage
- X **Solid Waste**
- X **Hazardous**
- X **Bulky Items/Scrap Metal**
- ☐ Animal Waste
- ☐ Other (describe):
- X **Waste oil**
- ☐ Greywater
- ☐ Sludges
- X **Contaminated soil and/or water**

It should be noted that the Goose Camp is permitted under NWB authorization 2BE-GOO1015 which includes waste types and quantities also linked to the 2015 Site Preparation Activities (i.e. sewage, domestic refuse from camp, greywater).

15. **QUANTITY AND QUALITY OF WASTE INVOLVED** – For each type of waste indicated in Block 14, describe its composition, quantity in cubic meters/day, method of treatment and method of disposal.

Type of Waste	Composition	Quantity Generated	Treatment Method	Disposal Method
Hazardous wastes	Petroleum Products and Lubricants – diesel fuel, oils, greases, anti-freeze, and solvents	Up to 0.02m^3/day	Sorted and temporarily stored on site in a designated area.	Backhauled and disposed of at an appropriate facility.
Waste Oil	Waste oil from construction equipment	Up to 0.01m^3/day	-	Where possible, waste oil will be used as fuel in waste oil burners. Otherwise, used oil products will be collected in tanks or drums marked "Waste Oil" and disposed of at

				an approved facility.
Contaminated soil/water	Soil/water contaminated with hydrocarbons	Up to 0.05m^3/day	Treated by a 3rd party offsite	Backhauled to offsite facility for treatment/disposal
Scrap metal	Scrap metal	Up to 0.11m^3/day	Separated, sorted and stored temporarily on site.	Backhauled to Yellowknife and included in scrap metal recycling program.

16. OTHER AUTHORIZATIONS – In addition to the sub-surface and surface land use authorizations provided in Block 6, indicate any other authorizations required in relation to the proposed undertaking. For each provide the following:

In addition to Sabina's existing permits and authorizations, the following applications have been submitted in relation to the proposed 2015 Site Preparation Activities.

Authorization: Renewal of KTL304C017
Administering Agency: Kitikmeot Inuit Association
Project Activity: Amendment to existing permit.
Date (expected date) of issuance: 13 December 2014
Date of expiry: 13 December 2016

Authorization: Application for Access to Inuit Owned Land
Administering Agency: Kitikmeot Inuit Association
Project Activity: Site Preparation activities and the Goose Property including construction of all-weather road, airstrip extension, and ice road and airstrip for the 2015 winter season.
Date (expected date) of issuance: 01 February 2015
Date of expiry: 01 February 2017

Authorization: Application for Access to Inuit Owned Land
Administering Agency: Kitikmeot Inuit Association
Project Activity: Staging of a temporary laydown area at the Marine Laydown Area to store equipment, materials and fuel.
Date (expected date) of issuance: 01 February 2015
Date of expiry: 01 February 2017

Authorization: Amendment to KTP11Q001
Administering Agency: Kitikmeot Inuit Association
Project Activity: Expansion of the existing Goose Quarry to provide construction material for the all-weather road and all-weather airstrip expansion
Date (expected date) of issuance: 13 December 2014
Date of expiry: 13 December 2016

Authorization: Quarry Permit
Administering Agency: Kitikmeot Inuit Association
Project Activity: Development of the Umwelt Quarry to provide construction material for the all-weather road and all-weather airstrip expansion
Date (expected date) of issuance: 01 February 2015
Date of expiry: 01 February 2017

17. PREDICTED ENVIRONMENTAL IMPACTS OF UNDERTAKING AND PROPOSED

MITIGATION MEASURES - Describe direct, indirect, and cumulative impacts related to water and waste.

See Appendix B.

18. WATER RIGHTS OF EXISTING AND OTHER USERS OF WATER

Provide the names, addresses and nature of use for any known persons or properties that may be adversely affected by the proposed undertaking, including those that hold licences for water use in precedent to the application, domestic users, in-stream users, authorized waste depositors, owners of property, occupiers of property, and/or holders of outfitting concessions, registered trapline holders, and holders of other rights of a similar nature.

Advise the Board if compensation has been paid and/or agreement(s) for compensation have been reached with any existing or other users.

None identified.

19. INUIT WATER RIGHTS

Advise the Board of any substantial affect of the quality, quantity or flow of waters flowing through Inuit Owned Land (IOL), and advise the Board if negotiations have commenced or an agreement to pay compensation for any loss or damage has been reached with one or more Designated Inuit Organization (DIO).

No significant effects to water quality, quantity or flow are expected to result from the proposed site preparation activities. Therefore, negotiations or compensation agreements are not expected to be required.

20. CONSULTATION – Provide a summary of any consultation meetings including when the meetings were held, where and with whom. Include a list of concerns expressed and measures to address concerns.

Sabina maintains a community and government engagement program to discuss our current exploration programs and the development of the Back River Project. Most of our community discussions on water use and waste deposition have been of a general nature, with potential effects on water quality and quantity and potential accidental spills. In response, Sabina has implemented a Transportation Management Plan and Spill Contingency Plan that incorporate regulatory requirements, best management practices, Traditional Knowledge, and community consultation commitments.

21. SECURITY INFORMATION

Provide an estimate of the total financial security for final reclamation equal to the total outstanding reclamation liability for land and water combined sufficient to cover the highest liability over the life of the undertaking. Estimates of reclamation costs must be based on the cost of having the necessary reclamation work done by a third party contractor if the operator defaults. The estimate must also include contingency factors appropriate to the particular work to be undertaken.

Where applicable, the financial security assessment should be prepared in a manner consistent with the principals respecting mine site reclamation and implementation found in the *Mine Site Reclamation Policy for Nunavut,* Indian and Northern Affairs Canada, 2002.

See Appendix H – Abandonment and Restoration Plan.

22. FINANCIAL INFORMATION

Provide a statement of financial responsibility.
See Appendix M.

If the applicant is a business entity, provide a list of the officers of the company.

Rob Pease, President & CEO
Elaine Bennett, VP, Finance & CFO
Nicole Hoeller, VP, Communication & Corporate Secretary
Wes Carson, VP, Project Development
Angus Campbell, VP, Exploration
Matthew Pickard, VP, Environment & Sustainability

If the applicant is a business entity attach a copy of the Certificate of Incorporation or evidence of registration of the company name.

See Appendix M.

23. STUDIES UNDERTAKEN TO DATE - List and attach copies of studies, reports, research, etc.

Applicable studies pertaining to this application are:

2014 Draft EIS (DEIS)
2014 Baseline Studies
2013 Prefeasibility Report
2012 Ecosystems and Vegetation Baseline Report
2012 Hydrology Baseline Report
2011 Freshwater Baseline Report
2011 Back River Airstrip Fish and Fish Habitat Assessment
2012 Wildlife Baseline Report
2012 Archaeological Baseline Report
2012 Naonaiyaotit Traditional Knowledge Project (NTKP) – Back River (Hannigayok) Project

The pertinent results of these studies have been summarized in **Appendix B**. Complete copies of the baseline reports can be provided if requested.

24. PROPOSED TIME SCHEDULE – Indicate the proposed start and completion dates for each applicable phase of development (construction, operation, closure, and post closure).

Construction
Proposed Start Date: February 2015 (month/year) Proposed Completion Date: August 2015 (month/year)

Operation
Proposed Start Date: February 2015 (month/year) Proposed Completion Date: August 2015 (month/year)

Closure
Proposed Start Date: NA (month/year) Proposed Completion Date:

Post - Closure
Proposed Start Date: NA (month/year) Proposed Completion Date:

For each applicable phase of development indicate which season(s) activities occur.

Construction
X Winter **X Spring** **X Summer** ☐ Fall ☐ All season

Operation
☐ Winter ☐ Spring ☐ Summer ☐ Fall **X All season**

Closure
☐ Winter ☐ Spring ☐ Summer ☐ Fall **X All season**

Post - Closure
☐ Winter ☐ Spring ☐ Summer ☐ Fall **X All season**

25. PROPOSED TERM OF LICENCE

Number of years (maximum of 25 years): Two (2) years

Requested Date of Issuance: February 2015 (month/year) Requested Expiry Date: February 2017 (month/year)

(The requested date of issuance must be at least three (3) months from the date of application for a type B water licence and at least one (1) year from the date of application for a type A water licence, to allow for processing of the water licence application. These timeframes are approximate and do not account for the time to complete any pre-licensing land use planning or development impact requirements, time for the applicant to prepare and submit a water licence application in accordance with any project specific guidelines issued by the NWB, or the time for the applicant to respond to requests for additional information. See the NWB's *Guide 5: Processing Water Licence Applications* for more information)

26. ANNUAL REPORTING – If not using the NWB's *Standardized Form for Annual Reporting*, provide details regarding the content of annual reports and a proposed outline or template of the annual report.

The NWB standard form for annual reporting will be used by Sabina with refinements as determined.

27. CHECKLIST – The following must be included with the application for the water licensing process to begin.

Written confirmation from the NPC confirming that NPC's requirements regarding land use plan conformity have been addressed.

X Yes ☐ No If no, date expected _____

Written confirmation from the NIRB confirming that NIRB's requirements regarding development impact assessment have been addressed.

☐ Yes **X** No If no, date expected _____

Completed General Water Licence Application form.

X Yes ☐ No If no, date expected _____

Information addressing Supplemental Information Guideline (SIG) , where applicable (see Block 11)

X Yes ☐ No If no, date expected _____

English Summary of Application.

X Yes ☐ No If no, date expected _____

Inuktitut and/or Inuinnaqtun Summary of Application.

X Yes ☐ No If no, date expected _____

Application Fee of $30.00 CDN (Payee Receiver General for Canada).

X Yes ☐ No If no, date expected _____

Water Use Fee Deposit of $30.00 CDN (Payee Receiver General for Canada). The actual water use fee will be calculated by the NWB based upon the amount of water authorized for use in accordance with the Regulations at the time of issuance of the licence.

X Yes ☐ No If no, date expected _____

28. SIGNATURE

Matthew Pickard	Vice President, Environment & Sustainability Sabina Gold & Silver Corp.		October 17, 2014
Name (Print)	**Title (Print)**	**Signature**	**Date**